

What is claimed is:

1 1. A digital broadcast distribution signal
2 distribution system comprising:

3 two or more distribution centers, communicably
4 connected to one another through a communication line,
5 each of said distribution centers for distributing
6 a digital broadcast distribution signal, which has
7 been created based on program information received
8 in each said distribution center, to subscribers
9 through a CATV (Community Antenna Television) network,
10 for sending the digital broadcast distribution signal
11 to another of said distribution centers and for
12 receiving a digital broadcast distribution signal
13 from another of said distribution centers; and

14 subscriber terminals, each for receiving a
15 digital broadcast distribution signal distributed
16 from one of the distribution centers through the CATV
17 network so that a subscriber views a program,

18 each said distribution center including a
19 signal replacement section for replacing the
20 first-named digital broadcast distribution signal
21 created based on the program information received in
22 each said distribution center with the second-named
23 digital broadcast distribution signal, which each
24 said distribution center received from another of said
25 distribution centers, and

26 each of said subscriber terminals including
27 a distribution plan storage for retaining
28 channel distribution plans, one representing
29 distribution setting information of the
30 first-named digital broadcast distribution
31 signal of each said distribution center,
32 a distribution center
33 discriminating section for discriminating the
34 one distribution center that has created the
35 third-named digital broadcast distribution
36 signal, which is received in each said
37 subscriber terminal, and
38 a receiving section for changing, if the
39 one distribution center is discriminated not
40 to be a predetermined distribution center, NIT
41 information of the third-named digital
42 broadcast distribution signal based on the
43 channel distribution plans of the one
44 distribution center and the predetermined
45 distribution center, and receiving the
46 third-named digital broadcast distribution
47 signal.

1 2. A digital broadcast signal distribution
2 system according to claim 1, further comprising a local
3 station, communicably connected to one of said
4 distribution centers, for sending the third-digital

5 broadcast distribution signal from the last-named one
6 distribution center to subscribers downstream of said
7 local station without changing at least PSI /SI
8 (Program Specific Information/Service Information)
9 of the third digital broadcast distribution signal.

1 3. A digital broadcast signal distribution
2 system according to claim 1, wherein said signal
3 replacement section in each said distribution center
4 replaces the first-named digital broadcast
5 distribution signal with the second-named digital
6 broadcast distribution signal in accordance with a
7 reception state of the first digital broadcast
8 distribution signal at each said distribution center.

1 4. A digital broadcast signal distribution
2 system according to claim 2, wherein said signal
3 replacement section in each said distribution center
4 replaces the first-named digital broadcast
5 distribution signal with the second-named digital
6 broadcast distribution signal in accordance with a
7 reception state of the first digital broadcast
8 distribution signal at said each distribution center.

1 5. A digital broadcast signal distribution
2 system according to claim 1, wherein the CATV network
3 includes an optical fiber through which the

4 third-named digital broadcast distribution signal is
5 distributed to each said subscriber terminal.

1 6. A digital broadcast signal distribution
2 system according to claim 2, wherein the CATV network
3 includes an optical fiber through which the
4 third-named digital broadcast distribution signal is
5 distributed to each said subscriber terminal.

1 7. A digital broadcast signal distribution
2 system according to claim 3, wherein the CATV network
3 includes an optical fiber through which the
4 third-named digital broadcast distribution signal is
5 distributed to each said subscriber terminal.

1 8. A digital broadcast signal distribution
2 system according to claim 4, wherein the CATV network
3 includes an optical fiber through which the
4 third-named digital broadcast distribution signal is
5 distributed to each said subscriber terminal.

1 9. A digital broadcast signal distribution
2 system according to claim 5, wherein analog
3 transmission is performed on the third-named
4 broadcast distribution signal while being distributed
5 to each said subscriber terminal in the CATV network.

1 10. A digital broadcast signal distribution
2 system according to claim 6, wherein analog
3 transmission is performed on the third-named
4 broadcast distribution signal while being
5 distributed to each said subscriber terminal in the
6 CATV network.

1 11. A digital broadcast signal distribution
2 system according to claim 7, wherein analog
3 transmission is performed on the third-named
4 broadcast distribution signal while being
5 distributed to each said subscriber terminal in the
6 CATV network.

1 12. A digital broadcast signal distribution
2 system according to claim 8, wherein analog
3 transmission is performed on the third-named
4 broadcast distribution signal while being
5 distributed to each said subscriber terminal in the
6 CATV network.

1 13. A digital broadcast signal distribution
2 system according to claim 1, further comprising a
3 repeater for relaying the third-named digital
4 broadcast distribution signal in the CATV network.

1 14. A digital broadcast signal distribution

2 system according to claim 1, wherein the
3 communication line that communicably connects said
4 distribution centers is a ring network.

1 15. A digital broadcast signal distribution
2 system according to claim 1, wherein the first-named
3 digital broadcast distribution signal and the
4 second-named digital broadcast distribution signal
5 of each said distribution center are sent and
6 received through the communication line via Internet
7 Protocol (IP).

1 16. A digital broadcast signal distribution
2 system according to claim 1, wherein the third-named
3 digital broadcast distribution signal is
4 distributed to each said subscriber terminal by
5 using IP multicast.

1 17. A digital broadcast signal distribution
2 system according to claim 1, wherein each said
3 subscriber terminal further includes a distribution
4 plan obtaining section for obtaining the channel
5 distribution plans that are to be stored in said
6 distribution plan storage.

1 18. A subscriber terminal for receiving a
2 digital broadcast distribution signal from one of

3 a plurality of distribution centers, each of which
4 creates a digital broadcast distribution signal
5 based on program information received from a
6 provider, through a CATV (Community Antenna
7 Television) network so that a subscriber views a
8 program, said subscriber terminal comprising:

9 a distribution plan storage for retaining
10 channel distribution plans, one representing
11 distribution setting information of each of the
12 plural distribution centers;

13 a distribution center discriminating section
14 for discriminating the one distribution center that
15 has created the first-named digital broadcast
16 distribution signal received in said subscriber
17 terminal; and

18 a receiving section for changing, if the one
19 distribution center is discriminated not to be a
20 predetermined distribution center, NIT information
21 of the first-named digital broadcast distribution
22 signal based on the channel distribution plans of
23 the one distribution center and the predetermined
24 distribution center, and receiving the first-named
25 digital broadcast distribution signal.

1 19. A subscriber terminal according to
2 claim 18, further including a distribution plan
3 obtaining section for obtaining the channel

4 distribution plans that are to be stored in said
5 distribution plan storage.

1 20. A subscriber terminal according to claim
2 19, wherein said distribution plan obtaining section
3 obtains the channel distribution plans through the
4 CATV network.

1 21. A subscriber terminal according to claim
2 19, wherein:

3 each of the channel distribution plans is
4 distributed in the form of an Entitlement Management
5 Message (EMM) or an Entitlement Control Message
6 (ECM); and

7 said distribution plan obtaining section
8 obtains each of the channel distribution plans from
9 the EMM or the ECM.

1 22. A subscriber terminal according to claim
2 20, wherein:

3 each of the channel distribution plans is
4 distributed in the form of an Entitlement Management
5 Message (EMM) or an Entitlement Control Message
6 (ECM); and

7 said distribution plan obtaining section
8 obtains each of the channel distribution plans from
9 the EMM or the ECM.

1 23. A subscriber terminal according to claim
2 19, wherein said distribution plan obtaining section
3 is communicably connected to a local station through
4 a public communication line and obtains the channel
5 distribution plans through the public communication
6 line.

1 24. A subscriber terminal according to claim
2 19, wherein said distribution plan obtaining section
3 is a recording medium reading section for reading
4 the channel distribution plans from at least one
5 recording medium in which the channel distribution
6 plans are stored.

1 25. A subscriber terminal according to claim
2 18, wherein said distribution center discrimination
3 section discriminates the one distribution center
4 based on a toll agency identification code.

1 26. A subscriber terminal according to claim
2 18, wherein said distribution center discrimination
3 section discriminates the one distribution center
4 based on an agency code allocated by a Certification
5 Authority (CA).

1 27. A subscriber terminal according to claim
2 18, wherein said distribution center discrimination

3 section discriminates the one distribution center
4 based on a broadcast service type switching code
5 (a network ID) or a service ID (S-ID) for a program
6 selection, which broadcast service type switching
7 code or service ID is input by an operator.

1 28. A subscriber terminal according to claim
2 18, wherein, when said subscriber terminal is
3 installed, the channel distribution plans are stored
4 in said distribution plan storage.

1 29. A subscriber terminal according to claim
2 19, wherein, when said subscriber terminal is
3 installed, the channel distribution plans are stored
4 in said distribution plan storage.

1 30. A subscriber terminal according to claim
2 24, wherein, when said subscriber terminal is
3 installed, the channel distribution plans are stored
4 in said distribution plan storage.